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HF/2876

PATENT
Attorney Docket: SP01-189RECEIVED
AUG 21 2003
TO 2800 MAIL ROOM

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Christopher J. Chase et al.

Serial No.: 09/911,119

Filed: July 23, 2001

For: APPARATUS AND METHODS FOR
DETERMINING BIOMOLECULAR
INTERACTIONS

Group Art Unit: 2876

Examiner: Ahshik Kim

Assistant Commissioner for Patents and Trademarks
Patent and Trademark Office
Washington, DC 20231

Sir:

Transmitted herewith is an amendment and/or reply in the above-identified application.

☐ Also enclosed a Declaration☒ No additional fee is required.☐ The additional claim filing fee has been calculated as shown below:

	<u>(Col. 1)</u> CLAIMS REMAINING AFTER AMENDMENT		<u>(Col. 2)</u> HIGHEST NO. PREVIOUSLY PAID FOR	<u>(Col. 3)</u> PRESENT EXTRA		ADD'L RATE	FEE
Total *	34	MINUS**	42	0	X	\$18	\$ 0.00
Indep.*	5	MINUS** *	5	0	X	\$84	\$ 0.00
FIRST PRESENTATION OF MULTIPLE DEP. CLAIM					X	\$270	\$
TOTAL							\$ 0.00

* If the entry in Col. 1 is less than the entry in Col. 2, write "0" in Col. 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, write "20" in this space.

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, write "3" in this space.

☐ The "Highest Number Previously Paid for" (Total or Independent) is the highest number found from the equivalent box in Col. 1 of a prior amendment or the number of claims originally filed.

☐ Authorization is given by Corning Incorporated to charge Deposit Account No. 03-3325 in the amount of \$_____.

X The Commissioner is hereby authorized by Corning Incorporated to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 03-3325. A duplicate copy of this sheet is enclosed.

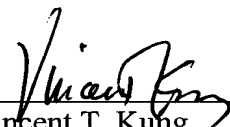
X Any additional filing fees required under 37 CFR 1.16.

X Any patent application processing fees under 37 CFR 1.17.

Respectfully submitted,

August 13, 2003

Date

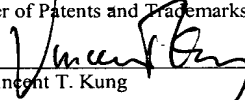


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Date of Deposit: August 13, 2003

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date indicated above with sufficient postage as first class mail in an envelope addressed to the: Commissioner of Patents and Trademarks, Washington, DC 20231

Signature



Vincent T. Kung



PATENT
SP01-189

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor: Christopher J. Chase, *et al.*

Serial No: 09/911,119

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Title: APPARATUS AND METHODS
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RESPONSE

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Assistant Commissioner for Patents
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RESPONSE TO THE EXAMINER'S OFFICE ACTION

In reply to the Office Action dated July 14, 2003, designated as Paper No. 10 in the above-captioned application, please enter the following amendments and Remarks as follows:

In the Claims

Please cancel claim 8, 23, 27, 31, and 36;

Please rewrite claims 1, 2, 3, 9, 21, 24, 25, 28, 29, 32, 34, 35, 37 and 39, according to the following:

1. (Currently amended) A molecular detection apparatus comprising:

a first compartment containing at least a ligand or a receptor;

a second compartment adjacent said first compartment;

a boundary area disposed between said first and second compartments;

a sensing area; and

means for detecting the diffusion of a molecule proximate the sensing area;

wherein said ligand is smaller than said receptor, and wherein the boundary area includes a membrane operative to allow said ligands to pass therethrough and to prevent passage of said receptors.

2. (Currently amended) The molecular detection apparatus of claim 1, further comprising a means for detecting the a rate of diffusion of the said molecule proximate the sensing area.